



STD

Machine working by interpolation between the cutting tool radius and spindle axis. The single point cutting tool generates the profile of the valve seat through an integrated design system, using radii and straight segments.

Machine specifically appropriate for machining of racing engines, for engine prototyping and for valve seats of very large diameters.



Machining capacity from 20mm to 163mm / 0.78" to 6.42".

Patented lightweight workhead : built-in spindle motor and triple air-float centering system. Minimal workhead inertia and maximal floatation for unmatched centering sensitivity.

Z and U axes digitally controled by standard ISO CNC language.

Built-in hollow shaft spindle motor, variable speed from 0 to 3000 RPM. High machining accuracy even at low speed due to total lack of mechanical transmission.

U axis controled by induction motor can reach a cutting feed rate up to 300 mm/min. Intake and exhaust seats can be performed simultaneously without tool holder changes.

Mechanical clamping of the work head on the machine bed with pneumatic clamping jack.

Modern modular machine bed design for improved rigidity. Computer enhanced static and dynamic characteristics provide the latest in machining technology.

TECHNICAL FEATURES

Space requirements

Length	mm / inch	2000/68.9
Width	mm / inch	1150/45.3
Height	mm / inch	2320/91.4

Max cylinder head dimensions

Length	mm / inch	unlimited
Width	mm / inch	500/19.7
Height	mm / inch	475/18.7

Table travel (Y-axis CNC optional)

mm/inch	170/6.7
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Machining capacity Ø min - max

mm	20 to 163
inch	0.78 to 6.42

Workhead travel (X-axis CNC optional)

Lengthwise	mm / inch	990/39
Crosswise	mm / inch	40/1.6
Sphere-cylinder travel	mm / inch	14/0.5

Spindle

Max. spindle inclination	degrees	5
Spindle travel	mm / inch	245/9.64
Spindle motor power	KW / HP	4 / 5.5
Spindle rotation speed	RPM	0 to 3000
Max spindle rotation speed	RPM	5000

Connections

Power supply	6.3kVA-3x400V-N+PE-50/60 Hz
Pneumatic supply	bar / psi 6/87
Max. air flow	l/mn -CFM 400/15
Noise level at 400 RPM	DbA 72
Noise level at 1200 RPM	DbA 82
Net weight approx.	kg / lbs 1560/3439

OPTIONAL FEATURES

Automated CNC X-axis

Allows an automated move of the machining head along the X-axis. This means you can machine all of your seats if they are in the same alignment. Requires an external supplied protection

Automated CNC Y-axis

Works only in application with automated CNC X-axis. Allows an automated move of the cylinder head support table along the Y-axis. This option means you can machine all of your seats even if they are not in the same alignment.

Cooling through spindle

Allows you to avoid excessive cutting heat damaging cutting bits on the hardest seats. Improves lubricity, increases tool life and the finish level.

Laser probing

Allows you to machine the seat automatically to the most accurate distance from the sealing face, if the sealing face differs from a cylinder head to another.



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